

Appl. No.: 10/530,925
Amd. Date November 10, 2006
Reply to Office Action Dated: August 17, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A mobile electronic apparatus comprising:

a main body having a battery chamber recessed generally in a rectangular shape in a lower portion of a back side of a casing, as opposed to a surface side having an operation unit and a display unit;

a battery pack adapted to be removably contained in the battery chamber formed at a back face of the casing of the main body; and

a collision avoiding unit including:

protrusions into the battery chamber from the main body having generally sector-shaped and concavely curved ascent/descent portions formed into substantially concavely arcuate faces oriented toward the loading direction of the battery pack and suitably shaped sector-shaped and convexly curved push-up portions formed into substantially convexly arcuate faces oriented toward the unloading direction of the battery pack~~which are disposed higher than and corresponding to a connecting terminal disposed in the battery chamber, on inner wall faces~~

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formed on the two sides along the loading direction of the battery pack so as to form the battery chamber and near a corner portion intersecting an abutting wall face perpendicular to the inner wall faces for forming the battery chamber, wherein said protrusions into the battery chamber from the main body are disposed higher than and corresponding to a connecting terminal disposed in the battery chamber; and

riding portions which are protruded from the battery pack generally in a sector shape and are formed on a back face of the battery pack confronting the ascent/descent portions and the push-up portions on the two widthwise sides of the battery pack and ascending/descending while sliding on the sector-shaped faces of the push-up portions so as to ride over the connecting terminal disposed in the battery chamber, wherein the riding portions of the battery pack are formed into substantially convexly arcuate faces oriented toward the unloading direction of the battery pack.

Claim 2 (Previously presented): The mobile electronic apparatus comprising:

a main body having a battery chamber recessed generally in a rectangular shape in a lower portion of a

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back side of a casing, as opposed to a surface side having an operation unit and a display unit;

a battery pack adapted to be removably contained in the battery chamber formed at a back face of the casing of the main body; and

a collision avoiding unit including:

generally sector-shaped ascent/descent portions and suitably shaped push-up portions which are disposed higher than and corresponding to a connecting terminal disposed in the battery chamber, on inner wall faces formed on the two sides along the loading direction of the battery pack so as to form the battery chamber and near a corner portion intersecting an abutting wall face perpendicular to the inner wall faces for forming the battery chamber; and

riding portions which are formed on a back face of the battery pack confronting the ascent/descent portions and the push-up portions on the two widthwise sides of the battery pack and ascending/descending while sliding on the sector-shaped faces of the push-up portions so as to ride over the connecting terminal disposed in the battery chamber,

wherein an area for a cleaning operation to clean outer face of the connecting terminal or a back electrode

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disposed in the battery pack is set between the ascent/descent portions of the casing on a main body side of the mobile electronic apparatus and the riding portions of the battery pack at the time when the battery pack is loaded into the mobile electronic apparatus.

Claim 3 (Currently amended): The mobile electronic apparatus as set forth in claim 1, wherein the mobile electronic apparatus is a mobile telephone having a rod-shaped the main body side casing;

~~wherein the collision avoiding unit is constructed that the ascent/descent portions disposed on the main body side casing of the mobile telephone are formed into generally concavely arcuate faces oriented toward the loading direction of the battery pack;~~

~~— wherein the collision avoiding unit is constructed that the riding portions of the battery pack are formed into generally convexly arcuate faces oriented in the direction to unload the battery pack; and~~

wherein the collision avoiding unit is constructed that a plurality of the connecting terminals are arranged along a shorter direction of the main body side casing, and a plurality~~plural~~ of the back electrodes are arranged on a back face of the battery pack so as to correspond to

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the connecting terminals for connecting to the connecting terminals of the battery chamber.

Claim 4 (Currently amended): A mobile electronic apparatus comprising:

a main body having a battery chamber recessed generally in a rectangular shape in a lower portion of a back side of a casing, as opposed to a surface side having an operation unit and a display unit;

a battery pack adapted to be removably contained in the battery chamber formed at a back face of the casing of the main body; and

a collision avoiding unit including:

protrusions into the battery chamber from the main body having generally sector-shaped ascent/descent portions and suitably shaped and curved push-up portions on inner wall faces formed on the two sides along the loading direction of the battery pack so as to form the battery chamber and near a corner portion intersecting an abutting wall face perpendicular to the inner wall faces for forming the battery chamber, wherein said protrusions into the battery chamber from the main body are disposed higher than and corresponding to a connecting terminal disposed in the battery chamber; and

riding portions which are protruded from the battery pack generally in a sector shape and are formed on a back face of the battery pack confronting the ascent/descent portions and the push-up portions on the two widthwise sides of the battery pack and ascending/descending while sliding on the sector-shaped faces of the push-up portions so as to ride over the connecting terminal disposed in the battery chamber, The mobile electronic apparatus as set forth in claim 1,

wherein the mobile electronic apparatus is a folding type mobile telephone having main body side casing portions connected to each other through a hinge;

wherein the collision avoiding unit is constructed that the ascent/descent portions disposed on the main body side lower casing of the mobile telephone are formed into generally convexly arcuate faces oriented toward the loading direction of the battery pack;

wherein the collision avoiding unit is constructed that the riding portions of the battery pack are formed into generally concavely arcuate faces oriented in the direction to unload the battery pack; and

wherein the collision avoiding unit is constructed that a plurality of the connecting terminals are arranged along the longer direction of the main body side casing,

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and a plurality of ~~the~~ back electrodes are arranged on a back face of the battery pack so as to correspond to the connecting terminals for connecting to the connecting terminals of the battery chamber.

Claim 5 (Previously presented): The mobile electronic apparatus as set forth in claim 1, wherein a plurality of the connecting terminals in the battery chamber are made of pin terminals protruded vertically upward from a floor face of the battery chamber, and are biased with an elastic force to freely move in a vertically upward direction.